

AlKarma Language School

Academic year: 2017/ 2018



Primary 4

Science Booklet

Second Term

- Student Name: ____________________
- Class : ____________________



Unit One Living Things
Lesson 1
The Digestive System

The structure of the living organism body:

The living organism body consists of a set of systems.
These systems are:

1- Digestive system:
It digests and absorbs food.

2- Respiratory system:
It carries the process of breathing.

3- Circulatory system:
It distributes the digested food and oxygen all over the body cells.

4- Urinary system:
It helps the body to get rid of the harmful substances.

5- Nervous system:
It lets us have the ability to feel, hear, see, smell, and taste.

6- Reproductive system:
It gives birth for new individuals.

The Human Digestive System:

It consists of :

a- Digestive canal:

-is a set of organs connecting to each other in the shape of a long pipe.(length 9–10 meters)

-It starts with the **mouth cavity** and ends in the **anus.**

b- Digestive canal supplementaries:

- consists of three types of glands connected to the digestive canal:

1- Salivary glands

2- Liver

3- Pancreas

Digestion: is the process of changing food from a complex form into a simple one which the body can use.

First: Mouth:

a- Teeth:

-There are 32 teeth in an adult's mouth.

- 16 in the upper jaw and 16 in the lower jaw.

- Each jaw is divided into:

4 incisors (cut and tear food)

2 canines (cut and tear food)

10 molars =4 premolars + 6 molars (molars grind food)

b- Tongue:

It tastes food and mixes it with saliva.

c- Salivary glands:

-They are 3 pairs.
-They secrete saliva in the mouth.
-Saliva has a digestive substance called **enzymes**.

Enzymes: digest starches, and converts them into simpler substances known as sugars.

Second: Pharynx:

Common cavity leads to the esophagus and trachea.

Three: Esophagus:

A muscular tube in which food moves from the mouth to the stomach.

Fourth: Stomach:

-Muscular sac works on mixing food.
- Food changes into semi-liquid substance.
- Incomplete digestion of protein by gastric juice.

Fifth: Small intestine:

- It has two main parts:
  - a- Duodenum
  - b- Ileum
- Length about 7 meters.
- Coils inside the abdominal cavity

Duodenum: is the first part of the small intestine where

a- **Bile juice** is secreted from **the liver**.
b- **Pancreatic juice** poured from **the pancreas**.

Bile juice: helps to digest fats where it changes fats into fatty emulsion.

Ileum: the digestion to different types of food is completed.

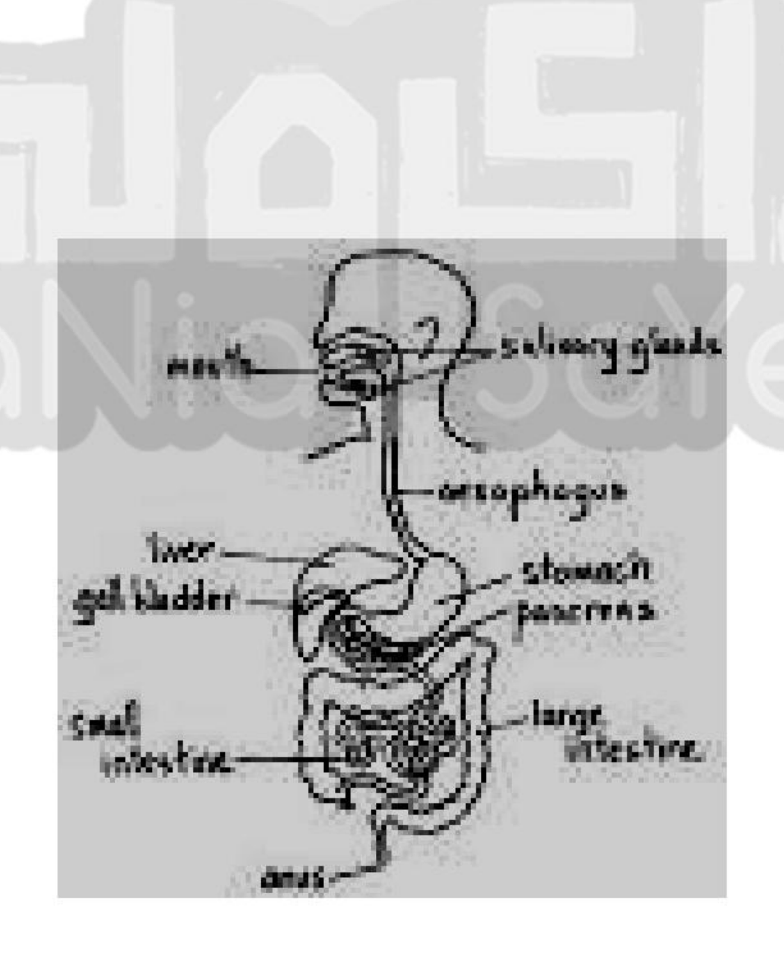
Absorption: takes place through the small intestine walls.

Sixth: Large intestine:

-starts with the **rectum** and end in then **anus.**

Rectum: water is absorbed from food remains.

Anus: wastes are ejected out of the body.



Unit One

Lesson one

The Human Digestive System

Worksheet 1

Fill in the blanks:

1- An adult person has ________________ teeth, ________________ in each jaw; where as a child has ______________ milk teeth, _____________ in each jaw. These teeth are replaced by strong ones before the age of ____________.

2- The teeth are divided into _____________, ______________, ______________ and ____________.

3- The functions of the tongue are:

a- ______________________________________

b- ______________________________________

4- There are ______________ pairs of salivary glands.

5- The function of the salivary glands is ____ ___________________________________

6- ___________________ in the stomach helps to digest protein.

7- The intestinal juices are: _______________(secreted by liver) and __________________ (produced by pancreas).

8- The small intestine starts with a part known as _________________ which is followed by another part called __________________.

9- The bile juice is ____

10- Absorption process takes place in the _______________________.

11- Water is absorbed in the _______________ from food remains, and then these wastes are ejected by the body through the _______________.

12- Gastric juice digests____________________ in the _________________________.

13- Bile juice helps to digest _________________ which change into __________________________, and takes place in the ________________________.

14- Saliva contains digestive substances called ________________ which converts ________________ into ________________. This process takes place in the ________________.

15- The digestive canal starts with ____________ and ends with ____________.

Give reasons for:

1)-Digestion process is very important.

----

2)-Teeth are different in their kinds.

----

3)-Bile juice is very important.

----

4)-You must not eat fast meals.

What is meant by:

1)-Digestion process.

Lesson Two
Human Respiratory System

-All of us can't live without air.
-Air contains oxygen gas which burns the small particles of the absorbed food to produce:
1- Energy
2- Carbon dioxide
3- Water vapor
This is called "respiration process".

The importance of the respiration process:
It gives the body the needed energy to do all the body activities.

1) Structure of Respiratory System:

1- Nose:

- It is lined with a mucous layer and hair that filter air from dust and microbes.
- It contains blood capillaries (tiny blood vessels) to warm the air as it passes through.

2- Pharynx:

- A common cavity leads to the esophagus and trachea.

3- Trachea:

- a tube supported with incomplete cartilage rings which makes it permanently open.
- Trachea is lined with cilia (tiny hair) to eject up strange objects.
- At the top of the trachea:

a- larynx: voice box

b- epiglottis: it closes the opening of trachea during swallowing to prevent entering the food in it.

- The bottom of the trachea:

Branches into two narrow tubes called bronchi entering the lungs.(plural noun)-(singular is bronchus).

4- Lungs:

a- Bronchus (it is divided into bronchioles)

b- Bronchioles

c- alveoli (the ending part of the bronchioles) surrounded by a lot of blood capillaries in where gas exchange occurs.

- Lungs are surrounded by ribs to protect them.

- *Diaphragm:* is a muscle that separates the thoracic cavity from the abdominal cavity.

Respiration: is the process in where the air rich in oxygen enters into the lungs, and the air rich in carbon dioxide released outside them.

2) Mechanism of Respiration:

Process of inhalation:

- The diaphragm muscle contracts causing the thoracic cavity to enlarge.
- The air rich in oxygen enters the lungs.

Process of exhalation:

- The diaphragm muscle relaxes causing the thoracic cavity to be narrow.
- The air rich in carbon dioxide moves outside the lungs.

Exchange of gases:

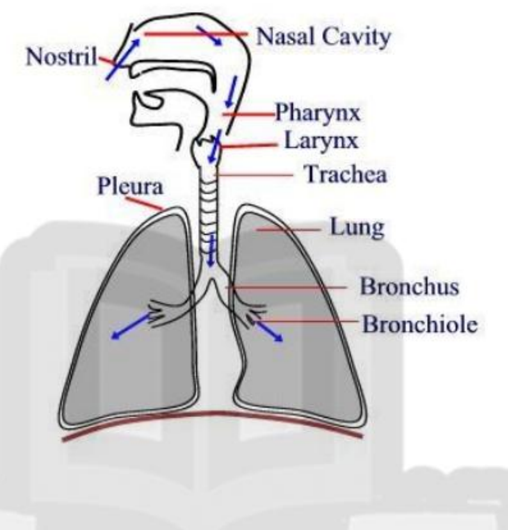
- Exchange of gases occurs between the air existed in alveoli and the blood flows in the capillaries via their thin walls.
- Blood leaves carbon dioxide (through alveoli to send it out of the lungs) and carries the oxygen (coming from the outside air) and distributes it all over the body cells.

3) Components of exhaled air:

Blowing air through a tube that contains clear lime water, turns it to be unclear (the turbidity of lime water) which is an evidence of carbon dioxide in the exhaled air.

Exhaling on the surface of a mirror shows that some water droplets are formed, which an evidence of the presence of water vapor in the exhaled air.

- Exhalation air contains carbon dioxide and water vapor.



Lesson Two

Human Respiratory System

Worksheet 2

1) Complete the following statement:

1- The human respiratory system consists of: ________, ___________, ___________ and _____________.

2- _____________ is a common cavity which leads to the esophagus and trachea.

3- At the top of the trachea, there are _____________ and _______________.

4- _________ closes the top of trachea during swallowing.

5- The respiration process includes _______________and _________processes, and it increases during __________.

6- The exhaled air contains ___________ and__________.

7- Nose is lined with _____________ and ______________.

8- ___________ is found in nose to warm the inhaled air.

9- Trachea is supported with ____________________.

10- Trachea is lined with ____________ to eject up dust.

11- The bottom of the trachea branches into two narrow tubes called _______________.

12- The exchange of gas takes place in the ____________.

13- Inside each lung, each bronchus is divided into ______ that end in ________________.

14- _______muscle helps in the mechanism of respiration.

15-Diaphragm separates _____ cavity from ______ cavity.

16- During the inhalation process, diaphragm ____________ and ____________.

17- During the exhalation process, diaphragm ____________ and ____________.

18- Carbon dioxide gas causes the turbidity of ________.
19- In inhalation process, we take ____________. But in exhalation process we expel _______________.
20- The exchange of gases occurs in alveoli between _________and ___________.

2) Choose the correct answer:

1- The organ which is responsible for warming air before entering lungs is __________.
a- pharynx b- nose c- trachea d- bronchi

2- __________ exist(s) in the nose to filter the air from dust and microbes.
a- Hairs b- Blood capillaries c- Mucous d-(a) and (c)

3- Trachea is supported by incomplete ______ to make it permanently open.
a- cilia b- mucous
c- blood capillaries c- cartilage rings

4- __________ is called the voice box.
a- Larynx b- Diaphragm c- Epiglottis d- Alveoli

5- The two lungs are surrounded by ___________.
a- muscles b- ribs c- skin d- diaphragm

Give reasons for:

1)-Importance of oxygen gas for human body.

---.

2)-Importance of respiration process.

---.

3)-Exhaled air turns lime water turbid.

---.

4)-Lungs have alveoli.

---.

5)-You must avoid being in crowded area.

---.

Lesson Three
The cell

What are cells?

A cell **is the smallest unit of living things that can carry out all the biological functions** (such as nutrition- motion- sensation- growth and reproduction)

The cell is the unit of structure and function in living organisms.

A unicellular organism is made of a single cell that carries out all its life processes.

Examples of unicellular organisms: amoeba, Euglena, Paramecium, bacteria and yeast fungus.

A Multicellular organism is made of more than one cell. Multicellular organisms include frogs, trees, and you!

- Each cell **carries out its own life process**, to keep itself alive.
- Each **type** of cells has **specific function**. For example, **muscle** cells **specialize in movement**.

How are cells organized?

- Cells are the building blocks of the body.

- **Similar cells** working together for the same job, or function, form **a tissue**.
- A group of tissues that work together to perform a specific function form **an organ**. The heart, liver, and skin are organs.
- Organs that work together to perform a certain function make up **a system**. For example, the circulatory system includes the heart, blood and blood vessels.

What is inside an animal cell?

1- Cell (plasma) membrane:

It is the outer membrane of the animal cell.

Function: it controls the substances that enter or leave the cell.

2- Cytoplasm:

It is a fluid that fills the cell, where all the cell components are suspended in it.

Function: All the biological operations of the cell occur in it

3- Nucleus:

It is a large and round structure found in the center of the cell.

Function: It organizes the biological processes in the cell and it is responsible for cell division.

In Plants:

- The plant body is made up of **systems** (shoot system and root system)
- These systems are made up of **organs** as roots, stems and leaves.
- Each organ is made up of **tissues** (such as the epidermis tissue of the onion plant leaf)
- Each tissue is made up of **similar cells**.

What is inside a plant cell?

- Plant cells have many of the same structures as animal cells.
- They often **have a box-like shape and are a bit larger than animal cells.**
- They also have **some additional structures** that animal cells do not have.

1- Cell Wall:

It is an additional outer covering around the outside of the cell.

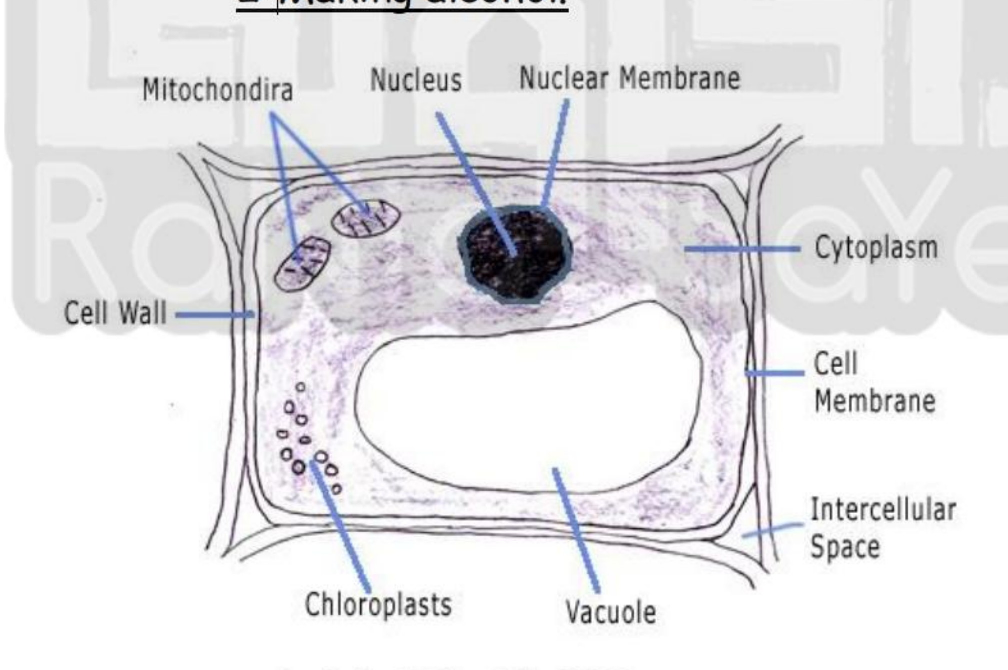
Function: It supports the plant cell and gives it a definite shape.

2- Chloroplast:

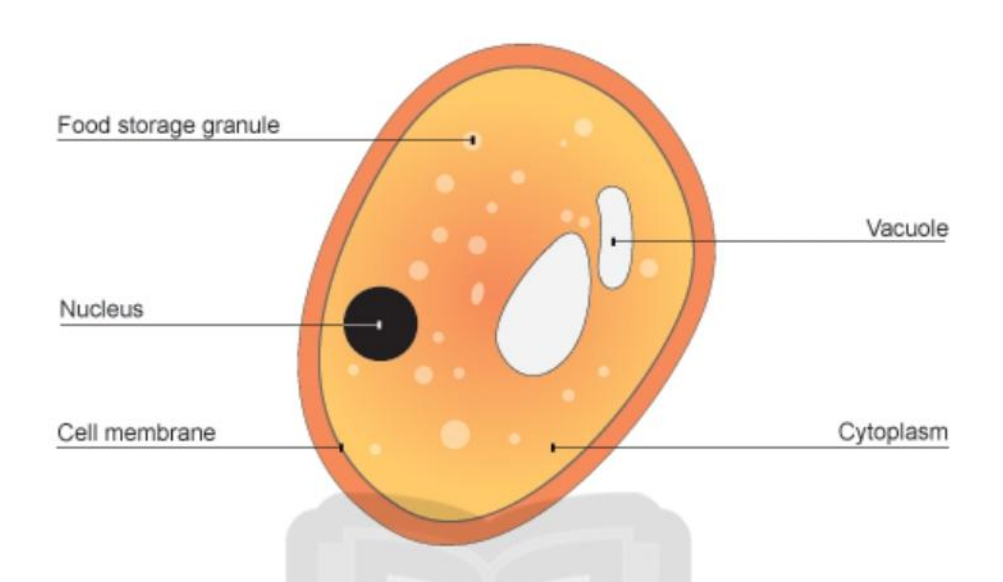
- A chloroplast is a green structure where the energy from sunlight is used to produce food for the plant in a process called photosynthesis.

Structure of yeast fungus:

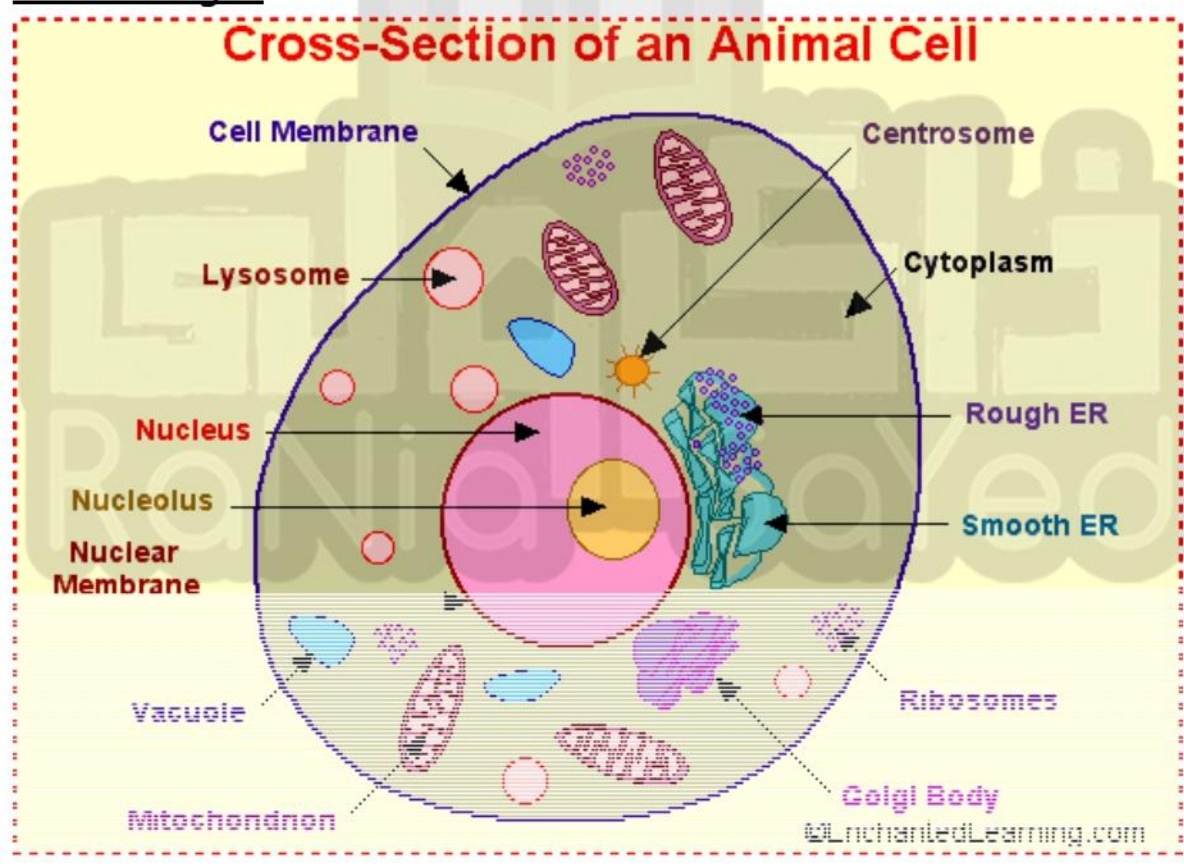
- It is a unicellular living organism made up of nucleus, cytoplasm and a cell wall that determines the cell shape.
- The fungus has a great economic Value: 1- Making bread.
  2-Making alcohol.



Labeled Plant Cell Diagram
Sketch by Abhishake Sharma



Yeast fungus



Lesson three

The Cell

Worksheet 3

Complete:

1- ______________ is the smallest building unit in the living organism's body.

2- The plant cell is composed of ____________, ____________, ____________ cytoplasm and __________________.

3- The plant cell is surrounded by ____________, while the animal cell is surrounded by _________.

4- The plant cell and the animal cell are similar in the presence of ____________, ____________ and ____________.

5- The plant cell is characterized than the animal cell by the presence of ________ and ________

6- _ ______________ and _________ are examples of unicellular organisms.

Choose the correct answer:

1- The correct structure of the human body is __

a- organ, tissue, cell, system

b- tissue, organ, cell, system

c- cell, tissue, organ, system

d- organ, cell, tissue, system

2- The system in the human body is composed of a group of __________

a- organs

b- tissues

c- different cell

d- similar cells

3- Roots and leaves are from the plant ________

a- systems b- organs c- cells d- tissues

4- The plasma membrane surrounds the ___ cell directly.

a- cytoplasm b- cell wall
c- nucleus only d- chloroplasts

5- The biological operations occur in _________

a- cytoplasm b- cell membrane
c- nucleus d- chloroplasts

6- ____________ organizes the biological operations in the cell and it is responsible for the cell division.

a- cytoplasm b- cell membrane
c- nucleus d- chloroplasts

7- ___________ is responsible of making food by photosynthesis process.

a- cytoplasm b- plasma membrane
c- nucleus d- chloroplasts

8- All of the following are from the components of the animal cell except ______

a- cytoplasm b- plasma membrane
c- nucleus d- chloroplasts

9- The plant cell performs the________

a- respiration function
b- transport function
c- photosynthesis function
d- all the previous answers

10- All of the following are from the properties of the living organisms except __________

a- motion b- sensation c- nutrition d- magnetism

11- The __________ is an example of unicellular living organisms.

a- frog b- snake c- yeast fungus d- bean plant

12- All of the following can be found in yeast fungus except ________

a- cytoplasm b- cell wall

c- nucleus d- chloroplasts

13- Yeast fungus is used in making _________

a- bread b- alcohol c- pizza d- (a), (b) and (C)

Put (√) or (X) and correct the wrong ones:

1- The group of similar cells forms a tissue.

2- The systems of the living organisms are composed of organs. ( )

3- The system is a group of tissues working together. ( )

4- Roots and stems are considered from the plant tissues. ( )

5- The cell wall surrounds the animal cell from outside. ( )

6- The cell membrane surrounds the cytoplasm. ( )

7- The life processes of the plant or animal cells occur by the organization of nucleus. ( )

8- The plant cell is similar to animal cells in containing nucleus and cytoplasm only. ( )

9- The chloroplasts are responsible of making food by the process of respiration. ( )

10- The yeast fungus is a harmful micro-organism. ( )

Write the scientific term of the following:

1- A group of symmetric cells. _________

2- A group of similar tissues. _________

3- A group of organs working together. _________

4- The building unit of the plant body. _________

5- The outer layer of a plant cell. __________

6- __________ A structure that surround the cytoplasm in the animal cell.

7- __________ A structure that controls the substances that enter or leave the cell.

8- __________ A fluid (a gel-like liquid) that fills the cell, where the biological processes occur.

9- __________ A unicellular organism used in baking bread and making alcohol.

10- __________ Tiny structures spread in the cytoplasm of the plant cells and are responsible of photosynthesis process.

Give reasons for each of the following:

1- Plants can make their own food.

____

____

2- Yeast fungus has an economic importance.

____

____

3- Chloroplasts play an important role in the plant cell.

____

____

Lesson Four
The Importance of Sunlight and Living Organism

Introduction:

- Plants are the only living organisms that produce (make) their own food, that is why they are called **producers**.

Producers: are the living things that can make their own food through the process of photosynthesis.

What is the process of photosynthesis?

It is the process of making food in the green parts of the plant (chloroplasts), using:

1- **light energy** from the ***sun***
2- **water** and **salts** from ***the soil***
3- **carbon dioxide** from ***air.***

To produce: 1- Oxygen
2- Sugar or starch.

Plant cells contain chloroplasts which:

a- Give the plant the green color.
b- Absorb sunlight.

Types of living things according to their feeding:

1- ***Producers:*** are the living organisms that can make their own food by the photosynthesis.

Examples: a- green plants
b- Some types of bacteria
c- Green algae

2- **Consumers:** are the living organisms that depend on producers directly (first consumer) or indirectly (second consumer) to get their food.

Examples: a- First consumers: cows – sheep – chicken – human.
b- Second consumer: lions – snakes – hawks- human.

3- **Decomposers:**

- They are living organisms that can't make their food by themselves due to the **absence of chloroplasts** in their cells.
- They get their food through the **decomposing** of the:

a- organic wastes (e.g. dead bodies),
b- plant remains
c- decayed food.

Examples: - Some types of bacteria
- Some fungi such as bread mold fungus
- Some worms

Importance of decomposers:

1- They help us to get rid of the dead organisms' bodies.
2- They increase the soil fertility.
3- They are used in a lot of industries.

Lesson Four

The importance of sunlight to living organisms

Worksheet 4

Complete:

1. The plant is the main source of ________ and ______ for man and animals.
2. In the plant, the photosynthesis process is carried out in __________ which contain ___________.
3. ____________ is a biological process that takes place in the green parts of the plant to make its own food.
4. The necessary factors of the photosynthesis process are __________, ____________ and ___________.
5. ____________ and ______________ are substances produced from the photosynthesis process.
6. The plant cells absorb sunlight by ____________ which give the plant its ___________ color.
7. ___________ is considered as a source of energy for plants.
8. In the photosynthesis process, _______ gas is absorbed and _________ gas is produced.

Write the scientific term of the following:

1- ____________ Living organisms that can make their own food by the photosynthesis process.

2- ____________ Living organisms depending on producers directly or indirectly to get their food.

3- ____________ Living organisms that get their food through decomposing organic wastes as dead bodies, plant remains and decayed food.

Choose the correct answer:

1- All the following are necessary for photosynthesis process except __________

a- carbon dioxide gas b- starch

c- sunlight d- water

2- Plants use __________ in the photosynthesis process.

a- oxygen gas b- nitrogen gas

c- carbon dioxide gas c- water vapour

3- Bread mold fungus is a _________

a- producer b- decomposer

c- consumer c- all of the previous answers

4- The rot that is formed on bread is a type of _____

a- bacteria b- fungi c- plants d- animals.

5- Chloroplasts are found in __________

a- green plants b- decomposers

c- consumers c- all of the previous answers

Give reasons for each of the following:

1- The green plants are called food producer organisms.

____

____

2- Decomposers and consumers can't make their own food.____

____

3- Decomposers have a great economical and environmental importance.

____

____

Unit Two
Lesson One
Forms Of Energy and their Changes

Forms of energy and their changes

Energy : is the ability to do work .

Food provide the body with energy

Fuel provides the car with energy.

Forms of energy :

1 – Potential energy.

Example: energy stored in spring of car toy.

2 – Light energy.

Example: energy produced from sun, electric lamp, torch,…

3 – Kinetic energy .

Example: moving car – moving fan.

4 – Sound energy.

Example: energy produced from piano, drum ,…..

Sound is produced due to vibration of object.

Example: a – you hear a sound when you tap a tuning fork.

b- You hear a sound when you pull e stretched rubber band.

5 – Electric energy

Energy produced from the dry cell (battery).

Changes of energy :

1 – From potential energy to kinetic energy

On rotating spring of toy, work is exerted and stored in it as a potential energy which change into kinetic energy on leaving it

2 – From kinetic into sound energy .

Example: a – when you move school bell.

B – When you beat a drum.

C – When you clap your hand.

d- When you pull stretched rubber band, it vibrates and produce sound energy.

3 – From kinetic energy to heat energy.

When you rub your hand together you feel warm.

4 –From kinetic energy to electric energy

Dynamo change the kinetic energy to electric energy.

5 – Changes of electric energy into :

A – Light energy: in electric lamp.

B – Kinetic energy: in motor (fan – washing machines – mixer

6 – Changing of light energy into :

A – heat energy :

If we collect sun rays on a piece of paper by using magnifying lens, the paper will burn because sun rays have thermal effect

B - electric energy :

- By using solar cells in artificial satellites and space ships.

Unit Two – Energy and its Forms

Lesson One

Forms of energy and their changes

Worksheet 5

Complete:

1- Energy is the ability to do ____________.
2- The spring of the children's toy stores ___________ energy.
3- ________ is the energy produced by a heater, while ________ is the energy produced by a radio.
4- ________ is the energy produced by a dry cell, while ________ energy is stored in a dry cell.
5- ________ is a form of energy that reaches ear causing hearing.
6- Sound originates from ___________.
7- In the guitar, _______ energy changes into _______ energy.
8- When you rub your hands together, _______ energy changes into _________ energy.
9- We get _________ energy from the solar cells.
10- In a solar heater, ______ energy changes into _____ energy.

Choose the correct answer:

1- The energy produced by a piano is the ___________
a- potential energy　　b- sound energy
c- electric energy　　d- chemical energy
2- The electric energy is produced by ___________
a- the dry cells　　b- the piano

b- the electric lamp c- the fan

3- The energy coming from the lamp or the sun is _______

a- potential energy b- sound energy

c- light energy d- kinetic energy

4- The kinetic energy changes into sound energy in _______

a- violin b- a lamp c- knocking on the door d- (a) and (c)

5- Dynamo changes the _________

a- electric energy into potential energy

b- light energy into electric energy

c- kinetic energy into light energy

d- kinetic energy into electric energy

Put (√) or (x) and correct the wrong ones:

1- The energy stored in the spring of a toy is kinetic energy. ( )

2- The energy produced from the solar heater is electric energy. ( )

3- Light is a form of energy that reaches ear causing hearing. ( )

4- Sound stops when the vibration of a tunning fork stops. ( )

5- Focusing the sun rays by a convergent lens on a piece of paper causes the changing of the light energy into electric energy. ( )

Give reasons for each of the following:

1- You hear a sound when you tap a tunning fork.

____

____

2- When you ride a bicycle, some changes of energy happen.

____

____

3- When you remove a nail from wooden plate, the nail becomes warm.

____

____

Lesson Two
The Electricity

There ara two types of electricity

Static electricity	**Dynamic electricity**
Produced due to accumulation of electric charges on objects	Produced due to flow of electric charges through a wire

Static electricity generation:

1 – On rubbing a balloon by a piece of wool , electric charges are formed on its surface and attract the powdered sugar to them.

2 – After rubbing the ruler by your hairs several times, electric charges are formed on the ruler and attract the small bits of paper

Formation of dynamic electricity(electric current)

Activity:

Put the battery inside the torch – then press its key.

What happens ……………?

The lamp light because chemical energy in the battery change to electric energy (electric charges) which pass through the wire to the lamp causing its lighting.

The simplest electric circuit :
Electric circuit: it is the path of electric current.

The battery: it is a source of electric current.

The switch (key): it is used to close and open the electric circuit.

The wire: used to transfer electric current from the battery to the lamp.

Examples of electric equipments used at home:

T.V – Washing machines – Heater – Computer,

Lesson Two The Electricity

Worksheet 6

1 – Choose the correct answer:

1 – Most of equipments at home work by ------------.

(heat - light - electricity)

2 - --------is formed when electric charges remain on an object.

(Static electricity - light - current electricity)

3 – The source of electric current called ------------.

(switch - wire - battery)

4 - ------------ is used to close and open the electric circuit.

(Wire - switch - battery)

2 – What happens when:

1 – Rubbing your hair by a comb.

----

2 – On closing an electric circuit by a switch.

----

3 – Give reasons:

1 – The electric circuit contains connecting wires.



Unit One

[1] – Complete the following statements :

1 – Esophagus allows food to pass from ---------to -------------

2 – Saliva changes -----------to -------------.

3 – Liver secretes --------- juice which is stored in ----------.

4 – The body gets rid of carbon dioxide through ---------- system

5 – The healthy breathing occurs through --------- and not through the ------------.

6 - ---------is the common organ for respiratory system and digestive system.

7 – The animal cell is surrounded by -----------while the plant cell surrounded by ----------.

8 – Yeast fungus is made up of --------, --------and------------

9 – The group of tissues which work together forms ----------

10 – The green leaves need ----------, ---------and ------------energy to perform photosynthesis process.

11 – When iodine solution is added to starch, its colour turns -------------.

13 – Water + ……………… ⟶ sugar + -------.

14 – Food chain begins with ----------and ends with ---------

15 - ----------- Feed on the organic remains.

[2] – Put (√) or (X) in front of the following statements :

1 – Absorption of food is completed in the small intestine. (   )

2 – The pancreas secretes gastric juice. (   )

3 – The number of teeth in an adult is 35. (   )

4 – The large intestine is a part of urinary system. (   )

5 – The gas exchange process takes place in alveoli. (   )

6 – The lungs and the heart are located in the chest cavity. (   )

7 – Lime water becomes turbid when the inhaled air passes through it. (   )

8 – Smoking does not affect man's health. (   )

9 – Both of plant cell and animal cell contains a nucleus. (   )

10 – The system is a group of tissues working together. (   )

11 – Green plants are called producers. (   )

12 – Oxygen gas is essential for photosynthesis process. (   )

13 – When a group of food webs connects with each other, they form a food chain. ( )

14 –Some fungi and bacteria are decomposers. ( )

15 – Herbivore consumer feeds directly on producers ( )

[3] – Write the scientific term :

1 – Changing the complicated food substances into soluble substances. ------------------

2 – A liquid secreted in the mouth and help in digestion of starch. -------------------

3 – An organ stores the undigested food. --------------

4 – An organ secretes gastric juice. --------------

5 – An elastic membrane separates chest cavity from the abdominal cavity. --------------

6 – Process of getting the air out of the lungs. ------------

7 – An organ that contains hairs to filter inhaled air from dust. --------------

8 – Process of getting the air into the two lungs. ----------------

9 - The gas which we can not live without it for few minutes. ----------------

10 – The building unit of living organisms. ---------------

11 – A group of cells that work together. ---------------

12 –Living organisms that can make their own food.

----

13 – It is the path of energy in a form of food from living organism to another one. ---------------

14 – Organisms help the environment to get rid of the remains of organisms. -----------------

15 – Consumer that feeds on herbivore consumer.

----

[4] – Choose the correct answer :

1 – The -------- substances is digested in the stomach .

(sugar – protein – fat)

2 – Saliva helps in the digestion of -----------.

(protein – fat – starch)

3 – The adult has ---------- molars in each jaw.

(2 - 10 - 32)

4 – Absorption of digested food takes place in the -------.

(stomach – small intestine – liver)

5 – Epiglottis is found -----------.

(above the pharynx – inside the nose – above the larynx)

6 – A living organism gets his energy from ------- process.
(digestion – excretion – respiration)

7 – The organ which warm the air before entering the lungs (nose – larynx – trachea)

8 – The gas that makes lime water turbid ------------.

(oxygen – nitrogen – carbon dioxide)

9 –The cell wall is found in the ------------.

(animal cell – plant cell – cells of human body)

10 – The --------- is an example of unicellular living organism. (frog – bean plant – bacteria)

11 – A group of organs that work together forms --------

(a cell - a system – a living organism)

12 – The gas produced during photosynthesis process---------.
(water vapour – nitrogen – oxygen)

13 – Photosynthesis process takes place in -----------.

(root – green leaves – flower)

14 – Chloroplasts are found in ------------.

(producers – consumers – decomposers)





Unit Two

[1] Complete the following :

1 – Changing of object state needs -------------.

2 – The measuring unit of force is -----------related to the scientist -------------.

3 – Force of ---------- moves the balloon upwards.

4 – Energy is the ability to do -------------.

5 – Sound is produced due to ---------- of objects .

6 – We get ----------energy from dry cell.

7 – In an electric motor , --------- energy changes to ----------- energy .

8 – Light energy change to chemical energy as in --------.

9 – In dynamo --------- energy changes to electric energy.

10 - --------- and ------------are from renewable resources of energy .

11 – The --------- is the main source of energy on the earth's surface.

12 – Solar cell changes ---------energy to ----------- energy.

13 - ----------is used to close and open the electric circuit.

[2] Put (√) or (X) in front of the following statements

1 – Electric lift depends on the effect of force in rising of heavy objects. ( )

2 – Electric fan rotates by the effect of water pushing. ( )

3 – Turning on a lamp changes kinetic energy into potential energy. ( )

4 – On beating a drum kinetic energy changes to light energy. ( )

5 – Coal, wind and water falls are renewable resources of energy. ( )

6 – Wind is used in rotating wind mills for generating electricity. ( )

7 – Petroleum is preferred than natural gas. ( )

8 – Sun is not necessary for growth of plants. ( )

9 – Rubbing of objects generates light. ( )

10 – Static electricity is formed from electric charges that remain on an object. ( )

[3] Write the scientific term :

1 – It is an effect that changes the state of an object.

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2 – The ability to do work. -----------------

3 – The energy produced from the dry cell. -------------

4 – It is the source of electric current in the electric circuit.
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5 – The energy stored on a spring of a car toy. --------------

6 – The energy of running water to rotate turbines.
----

7 – The cleanest forms of fuel. ----------------

8 – It is used to change solar energy to heat energy.
----

9 – It is rotated by wind to generate electricity.
----

10 – It is the path of electric current. ------------------

GOOD LUCK